

杀虫植物苦皮藤种子的倍半萜酯

程春泉 吴大刚

(中国科学院昆明植物研究所, 昆明650204)

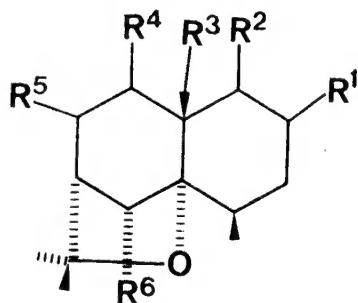
SESQUITERPENE POLYESTERS FROM THE SEEDS OF INSECTICIDAL PLANT CELASTRUS ANGULATUS

Cheng Chunquen, Wu Dagang

(Kunming Institute of Botany, Academia Sinica, Kunming 650204)

Key words *Celastrus angulatus*, Sesquiterpene polyester, Dihydro- β -agarofuran, Insecticide

Celastrus angulatus Max. is a significant insecticidal plant dispersed widely over our country. For its antifeeding value, the roots have been studied chemically as a result of some new sesquiterpene polyesters [1, 2]. The bioactive tests of its seed oil showed highly antifeedant effect on *Pieris rapae*, *Aulacophora femoralis*, *Henosepilachna vigintioctopunctata*, *Locastra muscosalis*, *Colaphellus bowringi* and *Calospilos suspecta* [3, 4]. In this continuing communication we report eight new sesquiterpene polyesters (1—8) isolated from the seeds of the plant by means of distribution and chromatography. Their structures have been characterized by spectroscopic and chemical methods and relate to dihydro- β -agarofuran skeleton as follows.



	R ¹	R ²	R ³	R ⁴	R ⁵	R ⁶
1	...OH	...OH	H	...OBz	...OBz	OAc
2	H	—OAc	H	...OBz	...OBz	OAc
3	—OAc	—OBz	OAc	—OAc	...ONic	H
4	—OAc	—OBz	OAc	—OAc	...OAc	H
5	H	—OBz	OAc	—OAc	...OAc	H
6	H	—OBz	OAc	—OAc	...ONic	H
7	H	—OBz	OiBu	—OAc	...ONic	H
8	H	—OBz	OPr	—OAc	...ONic	H

Bz = Benzoyl, Nic = Nicotinoyl, iBu = isoButyryl, pr = propionyl

References

1 Liu Jikai et al., *Acta Botanica Yunnanica* 1988 10; 256
2 Wakabayashi N, Wu W. J. et al., *J.Nat.Prod.* 1988 51; 537
3 柯治国等. 武汉植物学研究 1987, 5, 185
4 柯治国等. 植物保护学报 1985, 4, 208